

	Type	L #	Hits	Search Text	DBs	Time Stamp
1	BRS	L63	340	(transform or transforming or transformed or alter or altering or altered or convert or converting or converted or converts or transforms or alters or renovate or renovating or renovated or renovates or change or changes or changing or changed) near10 (aluminum) same ((aluminum adj nitride) or (aluminum adj oxynitride) or AlO or ALON)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/08/15 15:15
2	BRS	L65	4344	silicon same aluminum same (aluminum adj nitride)	USPAT	2002/08/15 15:42
3	BRS	L66	388	65 and capacitor	USPAT	2002/08/15 16:05
4	BRS	L67	79	(transform or transforming or transformed or alter or altering or altered or convert or converting or converted or converts or transforms or alters or renovate or renovating or renovated or renovates or change or changing or changes or changing or changed) same ((aluminum adj3 oxynitride) or ALON)	USPAT	2002/08/15 16:47
5	BRS	L70	1	((aluminum adj nitride) or (aluminum adj oxynitride) or (aluminum adj oxide)) and (first adj electrical adj node)	USPAT; US-PGP UB; EPO; JPO; DERWEN T; IBM_TD B	2002/08/15 17:25

	Type	Hits	Search Text
1	BRS	40	first adj electrical adj node
2	BRS	340	(transform or transforming or transformed or alter or altering or altered or convert or converting or converted or converts or transforms or alters or renovate or renovating or renovated or renovates or change or changes or changing or changed) near10 (aluminum) same ((aluminum adj nitride) or (aluminum adj oxynitride) or AlO or AlON)

	DBs	Time Stamp
1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/08/15 10:58
2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/08/15 11:20

US-PAT-NO: 5877557

DOCUMENT-IDENTIFIER: US 5877557 A

TITLE: Low temperature aluminum nitride

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1. A process for metallizing semiconductor devices in which corrosion of such metallization resulting from exposure to water vapor is prevented, said process including the steps of forming a plurality of aluminum contacts and, prior to formation of a semiconductor layer on said plurality of aluminum contacts, contacting the aluminum contacts with a nitrogen-containing plasma at a temperature within the range of about 200.degree. to 350.degree. C. for a period of time of about 30 to 60 minutes to thereby convert the top surface of the aluminum contacts to a layer of aluminum nitride having a thickness of about 10 to 20 Angstroms whereby corrosion of the aluminum is prevented.

US-PAT-NO: 4636374

DOCUMENT-IDENTIFIER: US 4636374 A

TITLE: Method for manufacturing aluminum oxynitride refractory

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When the selected dross happens to have a low nitrogen content and the produced alumina is expected to have a relatively high nitrogen content, therefore, it is desirable that the aluminum dross to be used should be subjected in advance to a nitriding treatment to have its nitrogen content sufficiently heightened in advance. The nitriding of the dross can be effected, for example, by placing the dross in an alumina refractory container and heating it therein in an atmosphere of nitrogen gas at a temperature of about 600.degree. to 700.degree. C. By the applied heat, the metallic aluminum remaining in the dross begins to undergo a nitriding reaction and the heat of this reaction further elevates the temperature of the reaction system and, consequently, the metallic aluminum contained in the dross is substantially completely converted into AlN, with the result that the nitrogen content of the dross is increased.

US-PAT-NO: 6335540

DOCUMENT-IDENTIFIER: US 6335540 B1

TITLE: Semiconductor device and process for fabricating the same

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Referring to FIG. 3B, nitrogen or oxygen ions, for example, nitrogen ions (N⁺) in this case, are implanted into the shaded region 37. Thus, the region 37 is nitrided and the amorphous silicon film 34 is partly converted into a light-transmitting silicon nitride film. Naturally, the silicon oxide film 33 is also converted into a silicon oxynitride film and rendered light-transmittable. The aluminum film 32 also turns into a light-transmitting aluminum nitride (AlN) film. Conclusively, all the regions subjected to the ion implantation turn into light-transmitting regions. The same effects result by implanting oxygen ions in place of nitrogen ions because an aluminum oxide (e.g. Al₂O₃) film is obtained from an aluminum film. A mixture of oxygen and nitrogen may be used to form aluminum oxynitride. (ALON)

DOCUMENT-IDENTIFIER: US 20020110330 A1

TITLE: Packaging for fiber optic device

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[0061] In the case of ion-beam assisted e-beam deposition, the chemistry of the electron beam deposited material can be altered using a reactive ion beam gas. For example, an aluminum thin film can be transformed to an aluminum oxide thin film using an oxygen ion source. Similarly, aluminum can be transformed to aluminum nitride using a nitrogen ion source. It should be understood that an argon ion source will not appreciably affect the aluminum chemistry since argon is chemically inert.